



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

## THE DIFFERENTIATION OF THE HIGH SCHOOL, THE COMING MOVEMENT IN EDUCATION.

Two articles in the February number of the School Review treat, 1st Of the High School and its enemies. 2d Of the Curriculum for Secondary Education, now under consideration by the National Council of Education. Permit me to say that I do not think the problem has yet been grasped in its entirety and that it cannot be satisfactorily settled until all the factors are considered. The opposition to the high school has lain in the facts that but a small proportion—five per cent. of the school population are there educated, and that its curriculum has been too much subordinated to college and University requirements. The last error is now perceived, yet not sufficiently perceived. When this is remedied, the first objection will also vanish. But this can only be done by treatment of the broadest and most thorough kind.

The educational methods of our country have been and are still for the most part scholastic, an education from books, an imparting of information about things. There has been scarcely any instruction—in the schools—in creation, in taking the raw material of nature and changing it into useful and beautiful forms, in doing that which the vast majority of people have to do for their life-work, and because imperfectly trained, do very imperfectly. A vast amount of creative work has been done outside of the schools, witness our roads, buildings, manufactures, I will not say our art, there is as yet so little to boast of—for the manifold defects of all which we are largely indebted to the lack of training, of creative instruction, in the schools.

The workers of the United States number about 22,000,000. Of these nearly half are agriculturists, 25 per cent. artisans, 20 per cent. in commerce, 5 per cent. professional. Of the school population of 8,000,000, 1 per cent. nearly, is in institutions of higher education, 5 per cent. in high schools and secondary institutions, 94 per cent. in the primary and grammar schools. Compare the two percentages. Twenty-five state universities have been founded and all sustained at large expense to educate the very much less than one per cent. of the school population

who will pass into the professional class. No lover of knowledge will regret the state universities or one dollar of the expense, though there may be a cry of class legislation. And every lover of knowledge will rejoice over the thousand or so of high schools with their 400,000 pupils. But every thoughtful educator must ask, how well are we educating the 94 per cent. of children who do not go beyond the grammar-school, many of whom indeed do not finish its course? Why do not more go on to the high school? Is the high school not fitting them in the best manner for their work in life?

There is one answer to these questions. It is the struggle for existence that keeps children out of the high school, and that takes them out of the grammar-school. It is because they are not there taught what they must do in life, because they are too much instructed in scholastic and not enough in creative knowledge, that their parents think they can not afford to give them more "schooling," and therefore take them away and put them to bread-winning.

It is a truism to say that the education of a country should be adapted to its needs, but in truth our education is not adapted to our present needs. We are giving a special education to the smaller class in the community—the professional—and making no provision for 94 per cent. of the workers. Agriculture, manufactures and commerce are the three material elements of national prosperity. That these three may attain high perfection is the constant effort of modern states. That this effort may be successful, it must be seconded, in fact the initiative must be taken, by the school.

I am convinced that the coming movement in education is that the school shall largely assist in training the child for its future special work in life. As the workers of the nation are agriculturists, artisans and commercial, the differentiation will naturally begin in the high school, by the addition of a commercial and an art-industrial course. These two courses will meet the needs of the commercial and artisan classes, and the latter will also assist the agriculturist, if another is not specially organized for him. The commercial course will give the special training of the so-called business colleges, book-keeping, commercial arithmetic, geography and law, with type-writing and stenography. With these should be carried on the present courses in English, science,

and a modern language. The time given should be two and when practicable three years. The art-industrial course will have special training in drawing and working in metal, wood, leather, clay, and other material. Like the commercial, it will dovetail in with a selection from the present high school studies. The present university course should be continued, not only for those who intend to take the higher education, but as a liberal education for those who do not—for the most part young women.

The people at large have been for some time feeling the need of this special education, tentative efforts have been made in various places, but without any well-digested scheme. Two hundred thousand pupils are being instructed more or less in various parts of the country in manual-training industries. The most of this work is done in grammar schools, and of course imperfectly, but the movement is in the right direction. The only commercial high school of which I know is that of San Francisco. It has day and evening sessions, some 800 pupils, is well conducted and highly valued. Commercial departments also are a part of the high school in Pittsburg, Detroit, Waltham, probably elsewhere. In California such departments will be organized this year at Stockton and Los Angeles. For three years San Francisco also carried on at public expense the Coggswell Polytechnic School. This has now reverted to its trustees, and art-industrial features are now being tacked on to the commercial high school. No doubt it will shortly differentiate into an art-industrial school.

Of the two differentiations, at the present stage of our national progress, I consider the art-industrial the more important. Skilled artisans are at present a great need of our country. Because we did not train them, we imported them so largely that foreign artisans control our labor unions and exclude American boys. Or rather, the lack of training on the part of American boys exclude them from the art industries. France is not so neglectful. She is the most skillful and artistic manipulator in the world of the raw materials, cotton, wool, silk, metal, etc., and she is so, largely because out of one hundred and seventy schools in Paris one hundred have workshops connected with them. Mr. Mundella, then minister of education in Gladstone's cabinet, told me, several years ago, that the South Kensington Museum was founded, as a commercial enterprise, to instruct the British artisan and enable him to compete with his continental rivals, and, he added, "it is worth millions of pounds a year to England."

That art-industrial training is felt to be a great educational need is shown by some recent benefactions, notably that of Mr. Drexel in Philadelphia, and Mr. Armour in Chicago. The higher education is now pretty well provided for. It is the secondary that needs the stream of gifts. But the work is so vast that public aid must supplement private benefaction. The "plant" needed for a commercial course is not very expensive, chiefly type writing machines, and few cities need be deterred by it. But the "plant" for an art-industrial department is quite another matter, forges, lathes, tools, and an abundance of materials to work with. When the need is once clearly seen, however, clear-headed communities will not be deterred by it.

Naturally art-industrial departments will first be engrafted on high schools established in manufacturing centers and the larger cities. As their advantages are felt, the movement will extend to the smaller towns.

The three great departments of knowledge are literature, science and art. For the first only provision was made in our early educational history. During the last thirty years large room has been made for the second. It is now time to crown the work by the harmonizing presence of the third and most beautiful of the sisters. Our roads have been made, our towns and cities built. No doubt they need to be remade and rebuilt. That is a part of the process of the ages. But the era of clearing a place for ourselves and the era of strengthening ourselves among the nations have passed. Now has come the era of advancement. These three eras are like the three elements of style, clearness, strength, beauty, and have a like natural relation. If our manufactures, the things we make, are to be beautiful, our children must be taught the principles and practices of art. There are plenty of signs abroad that the demand for the trained, skilled hand is increasing. That we are yet far inferior in skill to other nations is evident by the thousands of millions we pay them annually. The tariff charges alone last year were upwards of \$450,000,000.

It may be objected that this movement will be a mere organizing of trade-schools. Better trade-schools than no schools at all. Nine-tenths of the youth of the country leave school at fourteen, many even earlier. Art-industrial and commercial schools would hold a large proportion two or three years longer, for then they would be prepared and well prepared for their work in life. Par-

ents would not grudge the time nor boys work unwillingly. Few boys are mentally fitted to be scholars or to take a University course. The majority are well-constituted mentally to be good artisans, men of business, agriculturists. They will be much better workmen for good preparation. Moreover, as already indicated, some of the usual high school studies will be united with the special training. The "generals" will not be neglected while the "specials" are enforced. The citizen will be more intelligent and the artisan more skilled. Young lives will not be stunted and dwarfed by being driven to work at too tender an age. Ideals will have time to develop under good teaching at an age when ideals are formed, the standard of intelligence will be raised, the solving of many social problems assisted, more efficient men and women be trained for the work of the commonwealth.

*Herbert Miller.*

*Marysville, Cal.*

### ENDOWED SCHOOLS.

The secondary schools of this country may be divided into three classes, high schools maintained by general taxation, private schools supported entirely by fees paid by students, and endowed schools sustained in part by fees and in part by the income from invested funds. According to the report of the Commissioner of Education for 1888-9, there were in the United States about 725 schools of the first, 1,117 of the second, and 207 of the third class. The first class is increasing in numbers very rapidly at the expense of the other two. Popular interest in the last class has been declining for years, though at present it shows signs of a new life. It was the prevalent opinion for a time that endowed schools were not necessary, but that high schools would take their place. Experience has lead some at least to question this view, and to hold that endowed schools have still an important function in the educational system. As an advocate of this view, I wish to make a brief plea in its behalf.

Endowed schools are needed to maintain a high standard of secondary instruction. Such schools as Philips Exeter and Phil-